STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 8381 Order No. R-7773

APPLICATION OF ANADARKO PRODUCTION COMPANY FOR A WATERFLOOD EXPANSION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on October 17, 1984, at Santa Fe, New Mexico, before Examiner Gilbert P. Quintana.

NOW, on this 8th day of January, 1985, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Anadarko Production Company, seeks authority to expand its Ballard Grayburg-San Andres Unit (GSA) Waterflood Project by drilling two new injection wells located at unorthodox locations and by converting to water injection eight wells, all located as described in Exhibit "A" attached to this order.

(3) The Ballard GSA Unit producing wells in the expansion area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) The proposed waterflood expansion should result in the recovery of otherwise unrecoverable oil, thereby preventing waste. -2-Case No. 8381 Order No. R-7773

(5) Three wells directly offsetting the proposed waterflood expansion may not be plugged in such a manner as to confine the injected fluids in the waterflood interval.

(6) The three wells are identified as the Ballard GSA Unit Tract 10 Well No. 3, the Ballard GSA Unit Tract 26 Well No. 2, and the Ballard GSA Unit Tract 10 Well No. 2, all in Section 4, Township 18 South, Range 29 East. ÷

(7) Prior to the commencement of injection into said waterflood expansion, the operator should demonstrate that the wells described in Finding No. (6) above have either been re-plugged or have been previously plugged and abandoned in such a manner as to ensure that they do not provide an avenue of escape for fluids from the proposed injection zone and are in accordance with a program satisfactory to the supervisor of the Division's Artesia district office.

(8) The operator should otherwise take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(9) Prior to the commencement of injection into the Ballard GSA Unit leaseline injectors Tract 10 Well No. 9 and Tract 26 Well No. 4, an executed leaseline agreement between the applicant and offset operators to these wells should be submitted to the Division's office in Santa Fe.

(10) Said injection wells or system should be so equipped as to limit injection pressure at the wellhead to no more than 0.2 pounds per foot of depth but the Division Director shall have authority to increase said pressure limitation upon application should circumstances warrant.

(11) The subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Anadarko Production Company, is hereby authorized to expand its Ballard Grayburg-San Andres Unit Waterflood Project by completing two and converting eight wells to water injection, all located as described in Exhibit "A" attached to this order. -3-Case No. 8381 Order No. R-7773

(2) Injection into each of said wells shall be through internally coated tubing, set in a packer which shall be located at a maximum of 100 feet from the uppermost perforation; the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(3) The operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(4) Prior to the commencement of injection into said waterflood expansion, the operator shall demonstrate that the wells described in Finding No. (6) above have either been re-plugged or have been previously plugged and abandoned in such a manner as to ensure that they do not provide an avenue of escape for fluids from the proposed injection zone and are in accordance with a program that is satisfactory to the supervisor of the Division's Artesia district office.

(5) Prior to the commencement of injection into the Ballard GSA Unit leaseline injectors Tract 10 Well No. 9 and Tract 26 Well No. 4, an executed leaseline agreement between the applicant and offset operators to these wells must be submitted to the Division office in Santa Fe.

(6) The injection wells herein authorized and/or the injection system shall be so equipped as to limit injection pressure at the wellhead to no more than 0.2 pounds per foot of depth, provided however, the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.

(7) The subject waterflood project is hereby and shall continue to be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(8) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION Ó 7 Å ٠, lim · ~ V R. L. STAMETS Director

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BALLARD GRAYBURG-SAN ANDRES UNIT WATERFLOOD PROJECT EXPANSION

TRACT NO WELL NO.		WELL LOCATIONS
* 10	9	approximately 1980' FNL & 1310' FWL in Section 4
* 26	4	approximately 800' FSL & 1310' FWL in Section 4
5	9	1980' FNL & 990' FEL in Section 8
5	14	990' FSL & 1310' FEL in Section 8
8	4	660' FNL & 1980' FEL in Section 5
9	2	1980' FNL & 1980' FWL in Section 5
10	1	1980' FNL & 660' FEL in Section 5
11	1	2310' FNL & 330' FEL in Section 6
13	2	660' FNL & 660' FWL in Section 5
24	2	660' FSL & 990' FEL in Section 5

All wells are located in Township 18 South, Range 29 East, Loco Hills Pool, Eddy County, New Mexico.

*New wells to be drilled as unorthodox leaseline wells and not to be located closer than 10 feet to any leaseline boundary or quarter-quarter section line.

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EXH	"A"	